

Actuarial Valuation of the State of Wisconsin Duty Disability Program Under GASB 10

As of December 31, 2018

**State of Wisconsin Employee Trust Funds
Board Meeting
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Paul L. Correia, FSA, MAAA
Milliman, Inc.

Actuarial Valuation of Duty Disability Program

Limitations of Analysis

- We relied on information provided by the Department of Employee Trust Funds (ETF). If it is inaccurate or incomplete, our results may be affected.
- The valuation uses actuarial assumptions that are individually reasonable and which, in combination, offer our best estimate of anticipated experience.
- To the extent that actual experience varies from the assumptions, the emerging costs of the plan will vary from the projections we have prepared.
- The calculations in this presentation are consistent with our understanding of ETF funding requirements and goals. Additional determinations may be needed for other purposes.
- Milliman's work product was prepared exclusively for ETF for a specific and limited purpose. It is not for the use or benefit of any third party for any purpose.
- I, Paul Correia, am a Consulting Actuary with Milliman. I am a member of the American Academy of Actuaries, and I meet its Qualification Standards to render the actuarial opinion contained herein.

Duty Disability

Summary of Benefits

- Member Benefits:** 80% of salary (75% for local employees who are not eligible for a Social Security disability benefits and not eligible for a WRS disability benefit or LTDI)
- Benefit Offsets:** Social Security benefits
Unemployment compensation
Workers' Compensation
WRS retirement, separation, or disability benefits
Earnings from employer where the disability occurred
Earnings from other employment
- Benefit Increases:** Annual increases based on either Social Security salary index or WRS core annuity index, depending on the member's age and retirement status
- Survivor Benefits:** Survivor benefits are payable if the disabled member dies from the same condition that triggered Duty Disability benefits
- Survivor benefit amounts vary depending on disability date and disabling condition (cancer versus all other conditions)

Duty Disability

Liabilities as of December 31, 2018

Liability Component	Estimated Liability
Open Claims	\$398,952,462
Future Survivors	\$27,044,242
IBNR Claims	\$19,725,319
Loss Adjustment Expense	\$8,863,225
Total	\$454,585,247

- Open Claims: Liability reflects 966 disabled members and 59 survivors (i.e. spouses and domestic partners) who were receiving benefits as of December 31, 2018
- Future Survivors: Liability reflects future benefits payable to survivors of currently disabled members
- Incurred but not Reported (IBNR) Claims: Liability reflects expected future benefit payments to members and survivors whose claims were incurred but had not been reported as of December 31, 2018
- Loss Adjustment Expenses: Liability for future expenses related to ongoing management and payment of Duty Disability claims

Duty Disability

Comparison to Prior Year

Liability Component	12/31/2017	12/31/2018
Open Claims	\$403,395,912	\$398,952,462
Future Survivors	\$35,412,819	\$27,044,242
IBNR Claims	\$16,766,364	\$19,725,319
Loss Adjustment Expense	\$9,205,578	\$8,863,225
Total	\$464,780,673	\$454,585,247

- The 12/31/2017 valuation used a 7.2% interest rate, while the 12/31/2018 valuation used a 7% interest rate
- Liability for open claims decreased by approximately 1%
 - Number of open claims increased by approximately 1%
 - Average monthly benefit decreased by approximately 3%
- Liability for Future Survivors decreased due to a change in our mortality assumption
- Liability for IBNR claims increased
 - Most recent incurral years appear less complete this year relative to 2017
- Liability for loss adjustment expenses decreased slightly

Duty Disability

Retrospective Adequacy Study

Experience Period	Average Annual Margin	
	Disabled Members	Survivors
2012	0.17%	2.04%
2013	0.61%	0.56%
2014	0.05%	1.19%
2015	0.52%	3.34%
2016	0.55%	3.37%
2017	0.52%	1.75%
2018	0.05%	-0.48%
Total	0.35%	1.68%

- Experience: Claims from disabled members and survivors within the period 2012 - 2018
- Positive overall margins (i.e., 0.35% and 1.68%) indicate the liabilities were adequate to cover the runout of open claims during the study period

Duty Disability

Fund Balance and Surplus Position

Balance Sheet Component	2018
Beginning of Year Balance	\$637,955,774
+ Investment Income	\$30,311,677
+ Premium Contributions and Miscellaneous Income	\$10,194,578
- Insurance Claims	\$35,291,460
<u>- Administrative Expenses</u>	<u>\$1,175,391</u>
End of Year Balance	\$641,995,178
<u>Actuarial Liability as of December 31, 2018</u>	<u>\$454,585,247</u>
Surplus	\$187,409,931

- The plan was in a surplus position of \$187.4 million as of December 31, 2018

Duty Disability Funding Analysis

Modeled Scenario	Assumptions		Expected Surplus as of 12/31/2028 (\$ Million)
	Investment Income	Contribution Rate	
Baseline	7.0%	Current rates	\$324
Scenario 1	7.0%	50% of current rates starting in 2020	\$274
Scenario 2	7.0%	25% of current rates starting in 2020	\$248
Scenario 3	3.5%	Current rates	\$31
Scenario 4	7.0%	Waived starting in 2020	\$223

- Fund and surplus projections take into consideration potential future claims of active employees (even though estimated liability does not under GASB10)

Duty Disability

Conclusions

- Reserve margins do not indicate that a change in basis is necessary at this time.
- The funding analysis indicates that the Duty Disability Program has a surplus that is expected to grow in the coming years.
- A reduction in contribution rates may be warranted to reduce surplus growth.